

**Appl. No. 09/933,542**

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**CLAIM**

What I claim as my invention is:

1. An arrangement for using a single-phase or three-phase induction motor as a sensor to sense mechanical rotation of said induction motor's rotor by utilizing low-power alternating current generated in the stator winding or windings of said induction motor by mechanical rotation of the rotor of said induction motor at the time of said induction motor's driving electrical power completely disconnected from said induction motor, for the purposes of process control and/or display of said rotor's mechanical rotation, comprising:

said single-phase or three-phase induction motor,

two sets of electromagnetically operated switches; wherein first set of electromagnetically operated switches with at least one set of contacts in case of said induction motor of single-phase type, or at least two sets of contacts in case of said induction motor of three-phase type, opens the low-impedance path for the low power alternating current, generated by the mechanical rotation of the rotor of said induction motor in the absence of its driving electrical power, to the source of said electrical power and various transforming and/or driving elements thereof; the second set of electromagnetically operated switches with at least one set of contacts which closes in the event of said first set of electromagnetically operated switches having opened due to an electrical command to it or due to an electrical power outage,

allows for the routing of aforementioned low-power alternating current generated by said induction motor in aforesaid condition, as a signal to any process-control device or equipment regardless of said signal's manifestation in the form of any alarm or display, whereas for complete electrical isolation between said alternating current signal produced by said induction motor in said condition and the source of said electrical power together with various transforming and/or driving elements thereof, the numbers of sets of contacts in aforesaid two numbers of sets of electromagnetically operated switches are incremented by one apiece